

RICHARD C. KOLANCZYK

Chemist
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Education:

B.S., Chemistry, University of Wisconsin, Superior, 1982
M.S., Chemistry, University of Minnesota, Minneapolis, 1987

Employment:

2002-Present	Chemist, U.S. EPA, Duluth, MN
1995-2002	Research Chemist, U.S. EPA, Duluth, MN
1993-1995	Research Chemist, Science Applications International Corporation, Duluth, MN
1993	Chemist, U.S. EPA, Duluth, MN
1991-1992	Research Chemist, ASci Corporation, Duluth, MN
1987-1991	Chemist, Veterans Administration Medical Center-Minneapolis, MN

Research Interests and Skills:

QSAR model development for EPA chemical inventories; development of *in vitro* techniques for identification and quantification of metabolic activation in aquatic organisms; analytical chemistry method development for analysis of metabolites; developing metabolism and degradate databases for OPP; metabolism simulation

Selected Appointments/Honors/Major Awards:

ORD Science Communication Award 2004, ES&T Ecotoxicology Special Issue Group

Selected Publications:

- Kolanczyk, R.C., L.E. Solem, J.M. McKim III, P.K. Schmieder, (2007). A comparative study of phase I and II hepatic microsomal biotransformation of phenol in three species of salmonidae: hydroquinone, catechol, and phenylglucuronide formation. *Comp. Biochem. Physiol.* (submitted).
- Schmieder, P., M. Tapper, J. Denny, R. Kolanczyk, B. Sheedy, T. Henry, G. Veith, (2004). Use of trout liver slices to enhance mechanistic interpretation of estrogen receptor binding for cost-effective prioritization of chemicals with large inventories. *Environmental Science and Technology* 38, 6333-6342.
- Kolanczyk, R.C., P.N. Fitzsimmons, J.M. McKim III, R.J. Erickson, P.K. Schmieder, (2003). Effects of anesthesia (tricaine methanesulfonate, MS222) on liver biotransformation in rainbow trout (*Oncorhynchus mykiss*). *Aquatic Toxicology* 64, 177-184.
- Schmieder, P.K., M. A. Tapper, R. C. Kolanczyk, D. E. Hammermeister, B. R. Sheedy, J. S. Denny, (2003). Discriminating redox cycling and arylation pathways of reactive chemical toxicity in trout hepatocytes. *Toxicol. Sci.* 72, 66-76.
- Solem L. E., R. C. Kolanczyk, P. K. Schmieder, J. M. McKim, (2003). In vivo microdialysis method for the qualitative analysis of hepatic phase I metabolites of phenol in rainbow trout (*Oncorhynchus mykiss*). *Aquatic Toxicology* 62, 337-347.
- Kolanczyk, R. C., P. K. Schmieder, (2002). Rate and capacity of hepatic microsomal ring hydroxylation of phenol to hydroquinone and catechol in rainbow trout (*Oncorhynchus mykiss*). *Toxicology* 176, 77-90.
- Schmieder, P., M. Tapper, A. Linnum, J. Denny, R. Kolanczyk, R. Johnson, (2000). Optimization of a precision-cut trout liver tissue slice assay as a screen for vitellogenin induction: comparison of slice incubation techniques. *Aquatic Toxicology* 49, 251-268.
- Kolanczyk, R., P. Schmieder, S. Bradbury, T. Spizzo, (1999). Biotransformation of 4-methoxyphenol in rainbow trout (*Oncorhynchus mykiss*) hepatic microsomes. *Aquatic Toxicology* 45, 47-61.
- McKim, J.M., Sr., R.C. Kolanczyk, G.J. Lien, A.D. Hoffman, (1999). Dynamics of renal excretion of phenol and major metabolites in the rainbow trout (*Oncorhynchus mykiss*) *Aquatic Toxicology* 45, 265-277.